

Cognia STEM K-12 Standards

STEM Community

Standard 1 - School/program provides equitable opportunities for students to engage in high quality STEM learning.

Standard 2 - STEM educators collaborate to develop, implement, and improve high quality STEM learning activities.

Standard 3 - School/program engages diverse STEM community in order to support and sustain STEM programs and initiatives.

Standard 4 - School/program has established a shared vision for STEM and has leadership structures to support effective implementation.

STEM Learning Culture

Standard 5 - Leaders ensure that all stakeholders have ongoing opportunities to access information and learn about STEM implementation.

Standard 6 - Educators and leaders participate in an ongoing system of STEM-specific professional learning.

Standard 7 - Students engage collaboratively in authentic inquiry during ongoing units of study.

Standard 8 - Students engage in self-directed STEM learning guided by educators who are effective facilitators of learning.

STEM Experiences

Standard 9 - School/program provides within-school and extra-curricular opportunities for students to extend STEM learning.

Standard 10 - Students demonstrate their learning through performance-based assessments and have opportunities to develop self-assessment and self-monitoring skills.

Standard 11 - STEM learning experiences integrate all STEM disciplines with an emphasis on processes and practices associated with STEM.

Standard 12 - School/program provides high quality STEM courses and curriculum aligned to recognized standards and organized into interdisciplinary frameworks.

STEM Outcomes

Standard 13 - Students demonstrate STEM content knowledge representative of STEM literacy outcomes that prepare them for the next level of learning and work.

Standard 14 - Students develop STEM skills and cross-cutting competencies that support workforce readiness.

Standard 15 - School/program engages in a continuous improvement process for STEM.

Standard 16 - School/program conducts evaluative activities to ensure the effectiveness of STEM implementation.